

Appl. No. 10/684,604
Amtd. Dated August 30, 2005
Reply to Office action of June 3, 2005

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A multiple zone tester for drillstem testing a well having multiple zones, the system comprising:
a multiple valve mechanism including an upper valve for controlling fluid flow from an upper zone via a flow conduit, and a lower valve for controlling fluid flow from a lower zone via a bore;
a control conduit formed between a well annulus and the multiple valve mechanism to communicate a signal to selectively actuate the upper and lower valves;
a seal assembly adapted for temporary sealing engagement with a lower completion;
an upper zone measurement gauge functionally connected to the flow conduit; [[and]]
a lower zone measurement gauge functionally connected to the bore;[[.]]
a sensor in connection with the fluid conduit adapted for obtaining data related to the upper zone;
a sensor in connection with the bore adapted for obtaining data related to the lower zone;
and
an inductive coupler in function connection with the sensors for transmitting the data.
2. (original): The system of claim 1, wherein the upper valve is a sliding sleeve.

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3. (original): The system of claim 1, wherein the lower valve is a ball valve.
4. (original): The system of claim 1, wherein the signal is a pressure pulse.
- 5 (original): The system of claim 1, wherein the control conduit is a hydraulic line.
6. (original): The system of claim 1, wherein the control conduit is an electric line.
7. (original): The system of claim 1, wherein the upper zone measurement gauge is positioned between the upper valve and the upper zone.
8. (original): The system of claim 1, wherein the lower zone measurement gauge is positioned between the lower valve and the lower zone.
9. (original): The system of claim 1, further including a packer positioned between the lower completion and a port from the wellbore annulus to the control conduit.

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10. (original): The system of claim 1, further including:

an open/close shifting tool for engaging a formation isolation valve in the lower completion; and
an open only shifting tool run below the open/close shifting tool for engaging a formation isolation valve in the lower completion.

11. (original): The system of claim 1, further including:

a sample chamber in connection with the flow conduit; and
a sample chamber in connection with the bore.

12. (canceled)

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13. (original): A multiple zone tester for drillstem testing a well having multiple zones, the system comprising:

a multiple valve mechanism including an upper valve for controlling fluid flow from an upper zone via a flow conduit, and a lower valve for controlling fluid flow from a lower zone via a bore;

a control conduit formed between a well annulus and the multiple valve mechanism to communicate a signal to selectively actuate the upper and lower valves;

an upper zone measurement gauge functionally connected to the flow conduit;

a lower zone measurement gauge functionally connected to the bore;

a dip tube extending below the multiple valve mechanism, the dip tube forming a portion of the bore;

a seal assembly carried by the dip tube, the seal assembly adapted for temporary sealing engagement with a lower completion;

an open/close shifting tool for engaging a formation isolation valve in the lower completion; and

an open only shifting tool run below the open/close shifting tool for engaging a formation isolation valve in the lower completion;

wherein the bore is formed through the multiple valve mechanism and the dip tube into a pipe string and the flow conduit extends from the upper zone to the bore via the upper valve positioned above the lower valve.

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14. (original): The system of claim 13, further including:

a sample chamber in connection with the flow conduit; and
a sample chamber in connection with the bore.

15. (currently amended): The system of claim 13, further including:

a sensor in connection with the fluid conduit adapted for obtaining data related to the upper zone;
a sensor in connection with the bore adapted for obtaining data related to the [[upper]]lower zone; and
an inductive coupler in function connection with the sensors for transmitting the data.

16. (original): The system of claim 13, further including a packer positioned between the lower completion and a port from the wellbore annulus to the control conduit.

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17. (original): A method of drillstem testing multiple zones in a well comprising the steps of:

- completing a lower zone and completing an upper zone to form a lower completion;
- running a multiple zone tester into the well on a pipe string to the lower completion;
- sealing the multiple zone tester in the lower completion in a manner such that fluid flow from the lower zone is controlled through a bore and fluid flow from the upper zone is controlled through a flow conduit;
- actuating a lower valve in communication with the bore to an open position, and
- actuating an upper valve in communication with the flow conduit to a closed position to test the lower zone;
- measuring characteristics of the lower zone;
- actuating the lower valve in communication with the bore to a closed position, and
- actuating the upper valve in communication with the flow conduit to an open position to test the upper zone;
- measuring characteristics of the upper zone;
- circulating fluid out of the drillstring;
- removing the multiple zone tester from the lower completion closing the top most formation isolation valve; and
- retrieving the measured zone characteristics obtained.

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18. (original): The method of claim 17, further including the step of:

actuating the lower valve in communication with the bore to an open position and
actuating the upper valve in communication with the flow conduit to an open
position to permit testing commingled fluid flow from the upper and lower zones.

19. (original): The method of claim 17, further including the step of:

transmitting zone data received during testing of the lower and upper zone.

20. (original): The method of claim 17, further including the steps of:

obtaining a sample of fluid from the upper zone; and
obtaining a sample of fluid from the lower zone.